## CLAIMS

WHAT IS CLAIMED IS:

1. A hypodermic needle assembly for use in making intradermal injections, comprising:

a hub portion that is able to be attached to a drug container;

a needle supported by the hub portion, the needle having a hollow body with a forward end extending away from the hub portion; and

a limiter portion that surrounds the needle and extends away from the hub portion toward the forward end of the needle, the limiter portion having a skin engaging surface that is adapted to be received against skin of an animal to receive an intradermal injection, the needle forward end extending beyond the skin engaging surface a selected distance such that the limiter portion limits an amount that the needle is able to penetrate through the skin of an animal.

2. The assembly of claim 1, wherein the hub portion and the limiter portion are integrally formed as a single piece made from a plastic material.

3. The assembly of claim 1, wherein the hub portion and the limiter portion are formed as separate pieces.

4. The assembly of claim 3, wherein the limiter portion includes an inner cavity that receives at least a portion of the hub portion and the inner cavity includes an

abutment surface that engages corresponding structure on the hub portion to thereby limit the amount that the needle forward end extends beyond the skin engaging surface.

5. The assembly of claim 3, wherein the limiter portion is integrally formed as part of the syringe and the hub portion is received within the limiter portion.

6. The assembly of claim 5, wherein the skin engaging surface surrounds the needle, and has a thickness defined between an inner diameter and an outer diameter and wherein the inner diameter is at least five times greater than an outside diameter of the needle.

7. The assembly of claim 6, wherein the skin engaging surface is generally circular.

8. The assembly of claim 1, wherein the skin engaging surface includes a central opening that is slightly larger than an outside dimension of the needle and the skin engaging surface is continuous.

9. The assembly of claim 1, wherein the skin engaging surface is generally flat and extends through a plane that is generally perpendicular to an axis of the needle.

10. The needle assembly of claim 1, wherein the selected distance that the forward end of the needle extends beyond the skin engaging surface is fixed.

11. The assembly of claim 1, wherein the selected distance is in the range from approximately .5mm to approximately 3mm.

12. The assembly of claim 1, wherein the skin engaging surface includes a contact surface area that is large enough to stabilize the assembly in a desired orientation relative to the skin.

13. The assembly of claim 12, wherein the desired orientation is generally perpendicular to the skin.

14. The assembly of claim 1, wherein the drug container is a syringe and the animal is human.

15. An intradermal delivery device for use in making intradermal injections, comprising:

a drug container having a reservoir adapted to contain a selected substance and an outlet port that allows the substance to exit the reservoir during an injection;

a needle in fluid communication with the outlet port, the needle having a forward end that is adapted to penetrate an the skin of an animal; and

a limiter that surrounds the needle and has a skin engaging surface that is adapted to be placed against the skin of the animal to receive an intradermal injection, the needle forward end extending away from the skin engaging surface a selected distance such that the limiter limits an amount that the needle forward end penetrates the skin.

16. The device of claim 15, wherein the drug container is a syringe including a generally hollow, cylindrical body portion and a plunger that is received within the reservoir, the plunger being selectively movable within the reservoir to cause the substance to be forced out of the outlet port during an injection.

17. The device of claim 15, including a hub portion that supports the needle and the hub portion is selectively secured to the drug container near the outlet port.

18. The device of claim 15, wherein the drug container is a syringe includes a generally flat body portion that at least partially surrounds the reservoir, the body portion and the reservoir are made from two sheets of thermoplastic material such that side walls of the reservoir are selectively deflected toward each other to expel a substance from the reservoir during an injection.

19. The device of claim 18, including a hub that supports the needle and is selectively secured to the syringe near the outlet port and a receiver adjacent the outlet

port that is generally circular and the hub is completely received within the receiver and wherein the limiter is integrally formed with the receiver such that the limiter is permanently supported by the body portion adjacent the outlet port.

20. The device of claim 19, wherein the skin engaging surface surrounds the needle, and has a thickness defined between an inner diameter and an outer diameter and wherein the inner diameter is at least five times greater than an outside diameter of the needle.

21. The device of claim 20, wherein the skin engaging surface is generally circular.

22. The device of claim 19, wherein the needle forward end extends away from the hub in a first direction and a needle back end extends away from the hub in a second direction, and including a sealing membrane that closes off the outlet port and wherein the needle back end pierces the sealing membrane when the hub is received by the receiver.

23. The device of claim 18, including a hub that supports the needle and is selectively secured to the syringe near the outlet port and a receiver adjacent the outlet port that is generally circular and the hub is completely received within the receiver

and wherein the limiter is formed separately from the receiver and is at least partially received by the receiver.

24. The device of claim 23, wherein the limiter and the hub are integrally formed into a single piece structure.

25. The device of claim 15, wherein the needle has a length and wherein the selected distance is much less than the needle length.

26. The device of claim 25, wherein the selected distance is fixed and is in the range from approximately .5mm to approximately 3mm.

27. The device of claim 15, wherein the skin engaging surface is generally flat and extends through a plane that is generally perpendicular to an axis of the needle.

28. The device of claim 15, wherein the skin engaging surface includes a central opening that is slightly larger than an outside dimension of the needle and the skin engaging surface is continuous.

29. The device of claim 15, wherein the skin engaging surface includes a contact surface area that is large enough to stabilize the assembly in a desired orientation relative to the skin.

30. The device of claim 15, wherein the desired orientation is generally perpendicular to the skin.

31. The device of claim 15, wherein the drug container is prefilled with a substance.

32. A method of intradermally injecting at least one substance such as a drug, vaccine or the like into the skin, comprising the steps of:

pressing a needle perpendicularly to the skin of the animal to receive an injection, said needle in fluid communication with an outlet port of a drug container having a reservoir adapted to contain a selected substance and the outlet port allows the substance to exit the reservoir during an intradermal injection;

injecting the substance into the skin of the animal with the depth of penetration of the needle being limited to the intradermal space by a limiter that surrounds the needle and has a skin engaging surface that is adapted to be placed against the skin of the animal and a forward end of the needle extending away from the skin engaging surface a selected distance such that the limiter limits an amount that the needle forward end penetrates the skin of the animal.

33. The method of claim 32, wherein the step of pressing the needle perpendicularly to the skin of the animal includes orienting the needle perpendicularly to the skin.

34. The method of claim 32, wherein the step of injecting the substance includes moving a plunger that is received within the reservoir, with the plunger being selectively movable within the reservoir to cause the substance to be forced out of the outlet port during the injection.

35. The method of claim 32, wherein the step of injecting the substance into the skin of the animal includes deflecting at least two sheets of thermoplastic material forming a generally flat body portion that at least partially surrounds the reservoir toward each other to expel the substance from the reservoir during an injection.

36. The method of claim 32, further comprising the step of filling the drug container with the substance to be intradermally injected.

37. The method of claim 32, wherein said drug container is a syringe and said animal is human.